

elf atochem



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Contains No CB

ELF ATOCHEM NORTH AMERICA, INC.
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Tel: 215-337-6500

8EHQ-0993-12436

September 13, 1993

**FEDERAL EXPRESS
RETURN RECEIPT REQUESTED**

Document Processing Center (TS-790)
Office of Toxic Substances
Environmental Protection Agency
401 M St. S.W.
Washington, D.C. 20460
Attn: Section 8(e) Coordinator

Subject: TSCA Section 8(e) Submission



8EHQ-93-12436
INIT 09/17/93



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09 SEP 17 AM 11:55

Dear Sir/Madam:

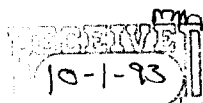
Elf Atochem North America Inc. is submitting the attached study to the Environmental Protection Agency (EPA) pursuant to Toxic Substances Control Act (TSCA) Section 8(e). This study does not involve effects in humans.

The enclosed study summary recently came into our possession via our parent company in France and provides information on MADQUAT BZ 75. MADQUAT BZ 75 is N,N-Dimethyl-N-[2-[(2-methyl-1-oxy-2-propenyl)oxy]ethyl] benzenemethanaminium chloride (CAS No. 46917-07-1). This product is manufactured for research and development purposes by Elf Atochem for use as a monomer in polymer synthesis.

Nothing in this letter or the enclosed study summary is considered confidential business information of Elf Atochem.

The title of the enclosed study summary report is MADQUAT BZ 75 Skin Sensitization Test in Guinea Pigs. The following is a summary of the adverse effects observed in the skin sensitization test.

MADQUAT BZ 75 was tested for potential to produce allergic skin reaction by intradermal injection and skin application to guinea pigs using a modified Magnusson and Klingman method. The test material produced a 75% (15/20) sensitization rate and was classified as a strong sensitizer.



TSCA 8(e) Submission
MADQUAT BZ 75
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Elf Atochem has not previously filed any 8(e) notices on the subject material. A premanufacture notification was previously filed by Elf Atochem and assigned case number P93-1412, but was found to be on the Confidential TSCA Inventory.

Results from the study summary report are being included in the current Elf Atochem Material Safety Data Sheet for MADQUAT BZ 75.

A copy of the full study report will be submitted to the Agency as soon as it becomes available. Further questions regarding this submission may be directed to me at (215) 337-6892.

Sincerely,

A handwritten signature in cursive script, appearing to read "C.H. Farr".

C.H. Farr, PhD, DABT
Manager, Product Safety
and Toxicology

Enclosure

MADOUAT BZ 75
SKIN SENSITIZATION TEST
IN GUINEA-PIGS

Addressee

Mr. J.F. Régnier
Atochem S.A.
Groupe Elf-Aquitaine
La Défense 10, Cédex 42
92091 Paris-la-Défense
France

Date: 5.6.92

SUMMARY

At the request of Atochem S.A., Paris-la-Défense, France, the sensitization potential of the test substance MADQUAT BZ 75 was evaluated in guinea-pigs by intradermal injection and cutaneous application, according to the maximization method of Magnusson and Kligman (1), the O.E.C.D. Guideline No. 406 and the Principles of Good Laboratory Practice (O.E.C.D., 12th May 1981).

Methods

Thirty guinea-pigs (15 males and 15 females) were allocated to 2 groups: a control group (5 males and 5 females) and a treated group (10 males and 10 females).

The sensitization potential of the test substance was evaluated after a 10-day induction period during which the animals were treated with the vehicle (control group) or the test substance (treated group). On day 1, in presence of Freund's adjuvant 0.1 ml of the test substance was administered by intradermal route at a concentration of 1% in NaCl at 0.9%. On day 8, 0.5 ml of the test substance in its original form was applied by cutaneous route. After a period of 12 days without treatment, a challenge cutaneous application of 0.5 ml of the vehicle (left flank) and 0.5 ml of the test substance in its original form (right flank) were then performed on all animals. The substances were prepared on a dry compress, then applied to the skin and held in place for 24 hours by means of an occlusive dressing. The cutaneous reactions were then evaluated at the challenge application site, 24 and 48 hours after removal of the dressing.

After the final scoring period, the animals were sacrificed and cutaneous samples were taken from the challenge application sites in all animals. No histological examination was performed on the cutaneous samples.

Reference

- (1) Magnusson, B.; Kligman, A.M.: The identification of contact allergens by animal assay. The guinea pig maximization test. J. Invest. Derm. 52: 268-276 (1969).

Results

No clinical signs were observed and no deaths occurred throughout the study.

After the challenge cutaneous application of the test substance, no cutaneous reactions in the control group and positive cutaneous reactions in the treated group were observed. The positive reactions consisted of a well-defined or moderate to severe erythema after 48 hours accompanied by a dryness of the skin in 10/10 males and in 5/10 females. The cutaneous reactions observed in 5/10 females were slight (erythema, scores of 1 or 2 after 24 hours and of 0 or 1 after 48 hours).

Conclusion

The test substance MADQUAT BZ 75 induced cutaneous reactions as a result of a sensitization process in 75% (15 out of 20) guinea-pigs. The allergenicity level of the test substance MADQUAT BZ 75 was IV "Strong" in guinea-pigs.

TEST ARTICLE ANALYSIS

METHACRYLOXYETHYLDIMETHYLBENZYL AMMONIUM CHLORIDE

(MADQUAT BZ 75)

Batch OP 749/90

ASPECT		C.L.
VISCOSITE (25°C)	Cps	n.d.
COLORATION	APHA	15
EAU	%	25,3
AMA	%	0,175
MADAME	%	0,066
EMHQ	ppm	885
POLYMERES	ppm	Néant
pH		5,8
pH 50/50		4,7
CHLORURE DE METHYLE	ppm	2
TOLUENE	ppm	3
Σ NI	ppm	58
CHLORO TOLUENE	ppm	308
CHLORO TOLUENE	ppm	147
Σ NI	ppm	78
CHLORURE DE BENZYLE	ppm	2
ALCOOL BENZYLIQUE	ppm	67
NI	ppm	20
CHLORURE DE BENZYLIDENE		
OU DICHLORO TOLUENE	ppm	106
NI	ppm	15
ACRYLATE DE BENZYLE	ppm	4
METHACRYLATE DE BENZYLE	ppm	96

0 6 DEC. 1991



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

JAN 18 1994

This letter formally acknowledges EPA's receipt of information submitted by your organization under Section 8(e), the "substantial risk" information reporting provision of the Toxic Substances Control Act (TSCA). For your reference, copies of the first page(s) of your submission(s) are enclosed and display the TSCA Section 8(e) Document Control Number (i.e., 8EHQ-0000-0000 Init.) assigned by EPA to your submission(s). Please refer to this cited number when submitting follow-up or supplemental information.

Please note that all submitted correspondence will be placed in the public files unless confidentiality is claimed according to the procedures outlined in Part X of EPA's TSCA Section 8(e) policy statement (43 FR 11110, March 16, 1978).

Confidential submissions submitted pursuant to the TSCA Section 8(e) Compliance Audit Program (CAP) should already contain information supporting confidentiality claims, because substantiation of CBI claims is required at the same time the 8(e) CAP is submitted to EPA. (If not done so already, please ensure that this information is provided to the Agency). When substantiating any/all claims, answer the questions detailed in the following attachment.

For NON-CAP submissions, any confidentiality claims should be supported by submission of information as described in the attachment(s).

12430 A



BEST COPY AVAILABLE

FACTS DATA:

Submission # 0993-12430 SEQ. A

TYPE (INT) SUPP FLWP

ELF
SUBMITTER NAME: Atochem North

America, Inc.

LIB. DATE: 09/15/93

OTS DATE: 09/17/93

CRAD DATE: 10/01/93

CHEMICAL NAME:

MADQUAT BZ 75

CASE

46917-07-1

INFORMATION TYPE:

P.F.C

INFORMATION TYPE:

P.F.C

INFORMATION TYPE:

P.F.C

201 ONCO (HUMAN) 01 02 04
202 ONCO (ANIMAL) 01 02 04
203 CELL TRANS (IN VITRO) 01 02 04
204 MUTA (IN VITRO) 01 02 04
205 MUTA (IN VIVO) 01 02 04
206 REPRO/TERATO (HUMAN) 01 02 04
207 REPRO/TERATO (ANIMAL) 01 02 04
208 NEURO (HUMAN) 01 02 04
209 NEURO (ANIMAL) 01 02 04
210 ACUTE TOX (HUMAN) 01 02 04
211 CHR. TOX (HUMAN) 01 02 04
212 ACUTE TOX (ANIMAL) 01 02 04
213 SUB ACUTE TOX (ANIMAL) 01 02 04
214 SUB CHRONIC TOX (ANIMAL) 01 02 04
215 CHRONIC TOX (ANIMAL) 01 02 04

0216 EPICL IN 01 02 04
0217 HUMAN EXPOS (PROD CONTAM) 01 02 04
0218 HUMAN EXPOS (ACCIDENTAL) 01 02 04
0219 HUMAN EXPOS (MONITORING) 01 02 04
0220 ECOAQUA TOX 01 02 04
0221 ENV. OCCURENCE/FATE 01 02 04
0222 EMER INCI OF ENV CONTAM 01 02 04
0223 RESPONSE REQUEST DELAY 01 02 04
0224 PROD/COMP/CHEM ID 01 02 04
0225 REPORTING RATIONALE 01 02 04
0226 CONFIDENTIAL 01 02 04
0227 ALLERG (HUMAN) 01 02 04
0228 ALLERG (ANIMAL) 01 02 04
0229 METABPHARMACO (ANIMAL) 01 02 04
0230 METABPHARMACO (HUMAN) 01 02 04

0341 IMMUNO (ANIMAL) 01 02 04
0342 IMMUNO (HUMAN) 01 02 04
0343 CHEMPHYT PROP 01 02 04
0344 CLASTO (IN VITRO) 01 02 04
0345 CLASTO (ANIMAL) 01 02 04
0346 CLASTO (HUMAN) 01 02 04
0347 DNA DAM/REPAIR 01 02 04
0348 PRODUCE/PROC 01 02 04
0349 MSDS 01 02 04
0350 OTHER 01 02 04

IMAGE DATA

NON-CH INVENTORY

ONGOING REVIEW

SPECIES

TOXICOLOGICAL CONCERN:

USE:

PRODUCTION:

YES (CON. INV.)

NO (DROP)

DETERMINE

YES (DROP/REF.)

NO (CONTINUE)

REFER.

GP

LOW

MED

HIGH

RiD, monomer in polymer synthesis

COMMENTS:

Non-CAP

skin sensitization in guinea pigs is medium because the test material sensitized 15/20 (75%) of the guinea pigs during a modified Magnusson + Kligman test.

CHEMICALS DATA: Submission # BEIU 0993-12430 SEQ B

TYPE: INTL SUPP/ELWP

SUBMITTER NAME: Atochem North

Amerisa, Inc.

INFORMATION REQUESTED: FLWP DATE:
0501 NO INFO REQUESTED
0502 INFO REQUESTED (TECH)
1513 INFO REQUESTED (VOL ACTIONS)
0504 INFO REQUESTED (REPORTING RATIONALE)
DISPOSITION:
0639 REFER TO CHEMICAL SCREENING
0678 CAP NOTICE

YES UNITARY ACTIONS:
0401 NO ACTION REPORTED
0402 STUDIES PLANNED/UNDERWAY
0403 NOTIFICATION OF WORK/RAID III ILS
0404 LABEL/MSDS CHANGES
0405 PROCESS/ANALYSIS CHANGES
0406 AP/PAUSE DISCONTINUED
0407 PRODUCTION DISCONTINUED
0408 CONFIDENTIAL

SUB DATE: 09/27/93 OTS DATE: 09/29/93 CRAD DATE: 10/25/93

CHEMICAL NAME:

MADQUAT Bz 75

CASE #

46917-07-1

INFORMATION TYPE:	P F C	INFORMATION TYPE:	P F C	INFORMATION TYPE:	P F C
0201 ONC O (HUMAN)	01 02 04	0216 EPICLIN	01 02 04	0241 IMMUNO (ANIMAL)	01 02 04
0202 ONCO (ANIMAL)	01 02 04	0217 HUMAN EXPOS (PROD CONTAM)	01 02 04	0242 IMMUNO (HUMAN)	01 02 04
0203 CELL TRANS (IN VITRO)	01 02 04	0218 HUMAN EXPOS (ACCIDENTAL)	01 02 04	0243 CHEM/PHYS PROP	01 02 04
0204 MUTA (IN VITRO)	01 02 04	0219 HUMAN EXPOS (MONITORING)	01 02 04	0244 CLASTO (IN VITRO)	01 02 04
0205 MUTA (IN VIVO)	01 02 04	0220 ECO/TOX TOX	01 02 04	0245 CLASTO (ANIMAL)	01 02 04
0206 REPRO/TERATO (HUMAN)	01 02 04	0221 ENV. OCCUR/REL/FATE	01 02 04	0246 CLASTO (HUMAN)	01 02 04
0207 REPRO/TERATO (ANIMAL)	01 02 04	0222 EMER INCI OF ENV CONTAM	01 02 04	0247 DNA DAM/REPAIR	01 02 04
0208 NEURO (HUMAN)	01 02 04	0223 RESPONSE REQUEST DELAY	01 02 04	0248 PROD/USE/PROC	01 02 04
0209 NEURO (ANIMAL)	01 02 04	0224 PROD/COMP/CHEM ID	01 02 04	0251 MSDS	01 02 04
0210 ACUTE TOX. (HUMAN)	01 02 04	0225 REPORTING RATIONALE	01 02 04	OTHER	
0211 CIR. TOX. (HUMAN)	01 02 04	0226 CONFIDENTIAL	01 02 04		
0212 ACUTE TOX. (ANIMAL)	01 02 04	0227 ALLERG (HUMAN)	01 02 04		
0213 SUB ACUTE TOX (ANIMAL)	01 02 04	0228 ALLERG (ANIMAL)	01 02 04		
0214 SUB CHRONIC TOX (ANIMAL)	01 02 04	0229 METAB/PHARMACO (ANIMAL)	01 02 04		
0215 CHRONIC TOX (ANIMAL)	01 02 04	0230 METAB/PHARMACO (HUMAN)	01 02 04		

TRIAL DATA:	NON-CBI INVENTORY	ONGOING REVIEW	SPECIES	TOXICOLOGICAL CONCERN:	USE:	PRODUCTION:
	YES (CONTINUE)	YES (DROP/REFER)	GP	LOW		
	NO (DROP)	NO (CONTINUE)		(MED) dermal sensitization as a polymer synthesis		
	IDENTIFIABLE	REFER		HIGH		

COMMENTS: Dermal sensitization. No clinical signs of toxicity or deaths were observed in 20 guinea pigs in this guinea pig sensitization study. After challenge, well-defined and moderate-to-severe erythema and dry skin were observed in 10/20 males and 5/10 females. Positive reactions were therefore seen in 75% (15/20) of the treated animals.